

LUB-100-A

5316.002



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Edward B. Kollin

Examiner: Justin R. Fischer

Serial No: 10/759,450

Art Unit: 1733

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Title: **LUBRICANTS FOR RUN-FLAT TIRE SYSTEMS**

Our File: LUB-100-A

**AFFIDAVIT OF EDWARD B. KOLLIN**

I, Edward B. Kollin being first duly sworn depose and say that:

1. I am the inventor of the subject matter of the above identified application.
2. I have read and am familiar with the Office Action of March 7, 2005.
3. I have read the references in the English language and had translated the foreign language European citations. Based upon the content of these references for the reasons which I have set forth hereinafter my invention does not appear to be either obvious or anticipated by these references.
4. By way of background prior to forming my own company, for sixteen (16) years, I was the engine research director for Advanced Fuels and Lubricants Group of Exxon Research and Engineering Company. Prior to that time I was a Senior Research Assistant for the physical chemistry department of the General

Motors Research Laboratories. As a consequence of my employment, I have wide formulation experience in lubrication including mineral and synthetic based PCMO, HDD, GEAR Oils, ATF, Metal Working Fluids and Greases as well as inhibitors, coating systems and surfactant systems.

5. The newly cited references do not teach disclosure suggest my invention. First, the Matzat reference teaches a lubricant very different than mine. The lubricant thereof is used in a conveyer where a rubber belt is supported on a metal support. The metal acts as a heat sink and, thus, the composition is not dependent on lubricant shear thinning to temporarily liquefy. Therefore in order to be effective the lubricant of Matzat is of a much higher viscosity and operates over a much wider temperature range since it acts as a lubricant for the purpose of friction reduction for power savings, as opposed to heat related component failure. The composition of Matzat cannot function as a tire lubricant because the lubricant is dependent on high temperature caused by the slight melting of the wax-like materials. The second failure of Matzat is the use of the silica thickener as the sole thickener.

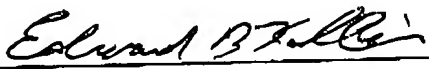
6. The Fricke reference lubricant is different from my invention in that the lubricant thereof does not depend on temporary sheer thinning and thus does not present the tire ring support interface with a liquid under sheer. This is because in Fricke the tire collapses on to the metal rim.

7. The key to my invention and which is not disclosed in the prior art is the initial viscosity and wherein the lubricant undergoes temporary sheer thinning and returns to substantially its starting viscosity.

LUB-100-A  
5316.002

8. None of the references provided by the Examiner teach or suggest the viscosities, as conceded by the Examiner the temporary shear, or the return to the starting viscosity.

Further affiant sayeth naught.

  
Edward B. Kollin